

Notice of Allowability	Application No.	Applicant(s)	
	09/853,626	COURSON, JERRY L.	
	Examiner	Art Unit	
	Medina A Ibrahim	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 09/04/03.
2. ☒ The allowed claim(s) is/are 1-9, 11 and 38-48 renumbered as 1-21.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____. | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input checked="" type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Jondle on 09/12/03.

The application has been amended as follows:

In The Abstract:

In the abstract on page 43, ---from said corn line KW4636--- has been inserted after "transgenes"; and "and to methods for producing other inbred corn lines derived from the inbred KW4636" before the period has been deleted.

In The Claims:

In claim 7, "from" has been replaced with ----prepared from cells or protoplasts of---.

In claim 8, "of said cells" after "protoplasts" has been deleted.

In claim 9, "is capable of expressing" in line 3 has been replaced with ---has---.

In claim 11, "second said" has been replaced with ---said second inbred---.

In claim 46, " and corn endosperm with improved nutritional quality" has been deleted; ---and --- has been inserted before "resistance to viral disease".

Claim 47 (Currently amended). A method of introducing a desired trait into corn inbred line KW4636 comprising:

a) crossing the KW4636 plants, grown from seed deposited under ATCC Accession No. PTA-_____, with plants of another corn line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from male sterility, herbicide resistance, insect resistance, [corn endosperm with improved nutritional quality] and resistance to bacterial, fungal or viral disease;

(b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;

(c) crossing the selected [F1] progeny plants with KW4636 plants to produce [first] backcross progeny plants;

(d) selecting for [first] backcross progeny plants that have the desired trait and physiological and morphological characteristics of corn [maize] inbred line KW4636 to produce selected [first] backcross progeny plants ; and

(e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise the desired trait and all of the physiological and morphological characteristics of corn [maize] inbred line KW4636 comprising : maturity of 99 Days; from emergence to 50% of plants in silk of 71 days and heat units of 1398; from emergence to 50% of plants in pollen of 69 days and heat units of 1359; plant height to tassel tip of 190.1 cm; ear height to base of top ear 65.3 cm; average length of top ear internode of 13.0 cm; average number of ears per stalk of 1.0 ; dark anthocyanin of brace roots; width of ear node leaf of 8.50 cm; length of ear node leaf of 80.3 cm; number of leaves above top ear of 6.0 ; leaf angle (from 2nd leaf above ear at anthesis to stalk above leaf) of 20.0; dark green leaf (Munsell

Code 5 GY 3/2); leaf sheath pubescence of 4; marginal waves of 4; longitudinal creases of 3; tassel with number of lateral branches of 9.1; branch angle from central spike of 50.5; tassel length (from top leaf collar to tassel top) of 34.0 cm; pollen shed of 8; yellow green anther (Munsell Code 10 Y 8.5/8); maroon glumes (Munsell Code 10 RP 4/6) with bar; ear (unhusked) with yellow green silk (3 days after emergency; Munsell Code 10 Y 8.5/8); light green fresh husk (25 days after 50% silking; Munsell Code 5 GY 5/8), and light yellow dry husk (65 days after silking; Munsell Code 5 Y 9/4); upright ear position; husk tightness of 4; long husk extension at harvest; ear length (husked) of 15.0 cm; and ear diameter at mid-point of 40.3 mm; ear weight of 131.6 gm; 16 distinct kernel rows; straight row alignment; shank length of 12.9 cm; kernel length of 11.6 mm; kernel width of 6.1 mm; kernel thickness of 3.9 mm; homozygous and colorless aleurone; yellow hard (Munsell Code 2.5 Y 7/8) endosperm; 23.2 gm per 100 kernels; red cob (Munsell Code 7.5 R 3/6); cob diameter (at mid-point) of 23.9 mm; stay green of 7 (65 days after anthesis); 0% of pre-anthesis brittle snapping and root lodging; and yield of 42 bu/acre (at 12-13% grain moisture), to produce selected backcross progeny plants, as determined at the [a] 5% significance level when grown in the same environmental conditions.

Claim 48 (Currently amended). A plant produced by the method of claim 47 [1], wherein the plant has the desired trait and all of the physiological and morphological characteristics of corn inbred line KW4636 comprising : maturity of 99 Days; from emergence to 50% of plants in silk of 71 days and heat units of 1398; from emergence to 50% of plants in pollen of 69 days and heat units of 1359; plant height to tassel tip of

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190.1 cm; ear height to base of top ear 65.3 cm; average length of top ear internode of 13.0 cm; average number of ears per stalk of 1.0; dark of anthocyanin of brace roots; width of ear node leaf of 8.50 cm; length of ear node leaf of 80.3 cm; number of leaves above top ear of 6.0; leaf angle (from 2nd leaf above ear at anthesis to stalk above leaf) of 20.0; dark green leaf (Munsell Code 5 GY 3/2); leaf sheath pubescence of 4; marginal waves of 4; longitudinal creases of 3; tassel with number of lateral branches of 9.1; branch angle from central spike of 50.5; tassel length (from top leaf collar to tassel top) of 34.0 cm; pollen shed of 8; yellow green anther (Munsell Code 10 Y 8.5/8); maroon glumes (Munsell Code 10 RP 4/6) with bar; ear (unhusked) with yellow green silk (3 days after emergency; Munsell Code 10 Y 8.5/8); light green fresh husk (25 days after 50% silking; Munsell Code 5 GY 5/8), and light yellow dry husk (65 days after silking; Munsell Code 5 Y 9/4); upright ear position; husk tightness of 4; long husk extension at harvest; ear length (husked) of 15.0 cm; and ear diameter at mid-point of 40.3 mm; ear weight of 131.6 gm; 16 distinct kernel rows; straight row alignment; shank length of 12.9 cm; kernel length of 11.6 mm; kernel width of 6.1 mm; kernel thickness of 3.9 mm; homozygous and colorless aleurone; yellow hard (Munsell Code 2.5 Y 7/8) endosperm; 23.2 gm per 100 kernels; red cob (Munsell Code 7.5 R 3/6); cob diameter (at mid-point) of 23.9 mm; stay green of 7 (65 days after anthesis); 0% of pre-anthesis brittle snapping and root lodging; and yield of 42 bu/acre (at 12-13% grain moisture), as determined at the [a] 5% significance level when grown in the same environmental conditions.

REQUIREMENT OF ALLOWANCE UNDER 37 CFR 1.801-1.809

The Deposit Statement in the amendment of 03/03/03 is deemed in accordance with 37 CFR 1.801-1.809. Since the application is otherwise in condition for allowance except for the needed deposit of seed, and since the Office has received written assurance that an acceptable deposit will be made on or before payment of the issue fee, the Office is authorized to mail Applicant a Notice of Allowance and Issue Fee Due together with a requirement that the needed deposit be made within THREE (3) MONTHS of the mail date of this letter (see 37 CFR 1.809(c)).

As set forth in 37 CFR 1.809(c), Applicant is required to deposit 2500 seeds of the claimed plant within THREE (3) MONTHS of the mail date of this letter; thus the time for making the deposit is on or before the payment of the issue fee. Although the time period for paying the issue fee cannot be extended, the time period for satisfying the deposit requirement may be extended under the provisions of 37 CFR 1.136. Failure to make the needed deposit of 2500 seeds will result in abandonment of the application for failure to prosecute.

Applicant is reminded that once the deposit of seed has been made, information regarding the date of deposit, description of the deposited material including number of seeds deposited, name and address of the depository, and the accession number must be added to the specification in order to comply with 37 CFR 1.809(d). In addition, the claims must be amended to replace the blank "_____" with the appropriate Accession Number. Amendments to the specification and the claims must be filed under 37 CFR 1.312. If these amendments are received after payment of the issue fee, these

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amendments must be accompanied by a petition and fee, and a showing of good and sufficient reasons why these amendments were not presented earlier.

Papers relating to this application may be submitted to Technology Sector 1 by facsimile transmission. Papers should be faxed to Crystal Mall 1, Art Unit 1638, using fax number (703) 308-4242. All Technology Sector 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform with the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina a. Ibrahim whose telephone number is (703) 306-5822. The Examiner can normally be reached Monday -Thursday from 9:00AM to 6:00 P.M. and every other Friday from 9:00-5:30P.M.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at (703) 306-3218.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0196.

9/13/03

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A handwritten signature in black ink, appearing to read "Amy Nelson", with a long horizontal flourish extending to the right.

AMY J. NELSON, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600